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DATE MAILED: 05/04/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------|----------------------|---------------------|------------------|--|
| 10/724,356 | 12/01/2003 | Andrzej Barwicz | 14540 | 8051 | |
| 293 | 7590 05/04/2006 | | EXAM | EXAMINER | |
| Ralph A. Dowell of DOWELL & DOWELL P.C. | | | EVANS, F | EVANS, FANNIE L | |
| 2111 Eisenho Suite 406 | ower Ave | | ART UNIT | PAPER NUMBER | |
| Alexandria, | VA 22314 | | 2877 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | <i>i</i> / |
|---|--|--|---|------------|
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| Office Action Summary | | 10/724,356 | BARWICZ ET AL. | |
| | omec Action Summary | Examiner | Art Unit | |
| | The MAILING DATE of this communication app | F. L. Evans | th the correspondence address | |
| Period fo | | sears on the cover sheet wi | ar the correspondence address | • |
| WHIC - Exter after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING DISCHEVER IS LONGER, FROM THE MAILING DISCHOOL OF THE MAILING THE MAIL | ATE OF THIS COMMUNION 36(a). In no event, however, may a rewill apply and will expire SIX (6) MONO, cause the application to become AE | CATION. apply be timely filed THS from the mailing date of this communication ANDONED (35 U.S.C. § 133). | |
| Status | | | | |
| 1)⊠ 2a)□ 3)⊠ | Responsive to communication(s) filed on <u>24 M</u> This action is FINAL . 2b) This Since this application is in condition for allowa closed in accordance with the practice under B | s action is non-final. nce except for formal matt | | s |
| Disposit | ion of Claims | | | |
| 5)⊠ 6)⊡ | Claim(s) <u>1-47</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra Claim(s) <u>1,2 and 8-47</u> is/are allowed. Claim(s) is/are rejected. Claim(s) <u>3-7</u> is/are objected to. Claim(s) are subject to restriction and/or | wn from consideration. | | |
| Applicat | ion Papers | | | ٠ |
| 10)⊠ | The specification is objected to by the Examine The drawing(s) filed on <u>01 December 2003</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine The specification is objected. | are: a)⊠ accepted or b)□ drawing(s) be held in abeyar tion is required if the drawing | nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(| (d). |
| Priority (| under 35 U.S.C. § 119 | | · | |
| а) | Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea See the attached detailed Office action for a list | ts have been received. ts have been received in A prity documents have been u (PCT Rule 17.2(a)). | opplication No received in this National Stage | |
| 2) Notice 3) Information | nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er No(s)/Mail Date <u>0804, 1105</u> . | Paper No | Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) | · . |

Application/Control Number: 10/724,356

Art Unit: 2877

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

The Information Disclosure Statements

The information disclosure statement filed on November 1, 2005 fails to comply with 37 CFR § 1.98(b)(2), which requires that each U.S. patent application publication listed in an information disclosure statement shall be identified by applicant, patent application publication number, and publication date. The last U.S. patent document listed on sheet 1 and all of the U.S. patent documents list on sheet 2 of the information disclosure statement filed on November 1, 2005 appear to be U.S. patent application publications. Because the complete patent application publication number of these documents has not been provided, the documents have not been considered. The other U.S. patent documents and the foreign patent documents cited in the information disclosure statement have been considered.

The documents cited in the information disclosure statement filed on August 12, 2004 have been considered.

Claim Objections

Claims 3-7 are objected to because "the advanced digital signal processing routines" bridging lines 2 and 3 of claim 3 and "said electrical spectral data" in line 3 of claim 3 lack antecedent basis.

Claims 4-7 inherit the problem through dependency. Appropriate correction is required.

Allowable Subject Matter

Claims 1, 2 and 8-47 are allowed over the prior art of record.

Claims 3-7 would be allowable if rewritten to overcome the objections of the claims set forth in this Office action.

As to independent claim 1, the prior art of record, taken alone or in combination, fails to disclose

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or render obvious an optical performance monitor for monitoring an optical signal and providing an estimate of a predetermined parameter x of that signal, the optical performance monitor comprising an auxiliary transducer to receive the optical signal and provide as an output a second data set representative of time-domain parameters of the signal and a processor to receive each of said data sets and to apply thereto digital signal processing routines to obtain estimates of the predetermined parameter, in combination with the rest of the limitations of the claim.

As to independent claim 14, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for monitoring a quality of data transmission of at least one optical channel, the method comprising the determining, obtaining and performing steps specified.

As to independent claim 26, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for monitoring a quality of data transmission of at least one optical channel, the method comprising the providing and determining steps specified.

As to independent claim 36, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for estimating a bit-error rate BER of data transmission on at least one optical channel comprising the steps of estimating from the quality of the optical signal a bit-error rate BER of data transmission, wherein the bit-error rate BER is estimated absent a summation of bit errors over a period of time sufficient to provide a statistically valid estimate of a bit-error rate BER, in combination with the rest of the limitations of the claim.

As to independent claim 44, the prior art of record, taken alone or in combination, fails to disclose or render obvious an optical performance monitor for monitoring an optical signal and providing an estimate of a predetermined parameter x of that signal, the optical performance monitor a processor to receive the data set, the processor applying thereto digital signal processing routines for signal reconstruction to obtain therefrom estimates of at least one of said predetermined parameters of power, wavelength or optical signal to noise ratio, in combination with the rest of the limitations of the claim.

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Ex parte Quayle

This application is in condition for allowance except for the above noted formal matters.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire TWO MONTHS from the mailing date of this letter.

Fax/Telephone Numbers

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (571) 272-2414.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

F. L EVANS PRIMARY EXAMINER ART UNIT 2871

fle April 28, 2006